

ABSTRACT

A light emitting device assembly comprises a light emitting diode (LED) chip, a substrate with two terminals, at least one encapsulation layer, and a thermally conductive adhesive to connect the LED chip and the substrate. The first terminal of the substrate is comprised of a portion with a width at least as wide as the LED chip and a vertical cross-sectional area of at least 30% of the total vertical cross-sectional area of the encapsulated assembly, and a straight element. The enlarged first terminal portion provides more area for heat dissipation and conduction, and along with the thermally conductive adhesive and the encapsulation package, provide enhanced thermal conductivity.